ENGINEERING AND RELATED SERVICES FEBRUARY 05, 2016

CONTRACT NO. 4400008172
RETAINER CONTRACT FOR INTELLIGENT TRANSPORTATION
SYSTEMS (ITS) STATEWIDE SYSTEM DESIGN, INTEGRATION AND
SYSTEM VERIFICATION SERVICES
STATEWIDE

DBE/WBE GOAL = 2\%

Under Authority granted by Title 48 of Louisiana Revised Statutes, the Louisiana Department of Transportation and Development (DOTD) hereby issues a Request for Qualification Statements (RFQ) on DOTD Form 24-102 (24-102), "Professional Engineering and Related Services", revised November 2011, from Consulting Firms (Consultant) to provide engineering and related services. Consultants who are a Louisiana or foreign LLC or corporation should be appropriately registered with the Louisiana Secretary of State, as contemplated by Title 12 of the Louisiana Revised Statutes, and with LAPELS under it's rules for FIRMS. If a Consultant fails to place itself in good standing in accordance with those provisions, it may be subject to consequences contemplated in Title 12 and/or the LAPELS rules. All requirements of Louisiana Professional Engineering and Land Surveying (LAPELS) Board must be met and the Prime Consultants shall be registered with the Federal Government using SAM.gov at the time of submittal. One Prime-Consultant/Sub-Consultant(s) (Consultant/Team) will be selected for this Contract.

DOTD employees may not submit a proposal, nor be included as part of a Consultant's team.

Project Manager – Stephen Glascock Project Manager- Carryn Sollie

All inquiries concerning this advertisement should be sent in writing to masood.rasoulian@la.gov and heather.huval@la.gov.

PROJECT DESCRIPTION

The selected Consultant will perform highly specialized and technically complex ITS system engineering, integration and support services, system analyses, independent verification and validation (IV&V) services, and develop system engineering designs, technical specifications, and cost estimates to support the DOTD Intelligent Transportation Systems (ITS) Program for statewide projects covered by a Retainer Contract under separate Task Orders. The Consultant will also support the delivery of ITS performance measurement reporting while utilizing all pertinent data resources furnished by the ITS program.

The Consultant will be required to execute a Task Order which will specify the scope of services, contract time, and compensation. Each Task Order will become a part of the Retainer Contract.

SCOPE OF SERVICES

The selected Consultant will be required to provide some or all of the following services for each Task Order (TO):

Specific technical support expected of the Consultant shall include areas of:

- Autonomous Vehicle/Connected Vehicle (AV/CV) Systems
- Electronic Toll Collection (ETC) Systems
- Advanced Traveler Information Systems (ATIS)
- Transportation Data Mining & Dissemination, and
- Advanced Transportation Management Systems (ATMS).

1. PROJECT MANAGEMENT AND PROGRAM ASSISTANCE

Depending on the nature and scope of work being performed, Project Management may be continuous throughout a Task Order.

A meeting with the DOTD's ITS Section, the Consultant, and any third party applicable to a particular project, shall be held at the beginning of each task order development. The purpose of this meeting is to develop a detailed scope of services based on establishing a framework for continued coordination, developing a mutual understanding of the deliverables, identifying the execution of work, and agreeing on design procedures. Information, where applicable, such as ITS Strategic Business Plans or Statewide/Regional Architectures shall be provided and/or requested at this meeting. Minutes shall be developed by the Consultant and distributed after this meeting.

Program assistance may also be required, including development of strategic and business plans for various ITS initiatives (e.g., AV/CV, crowdsourcing ATIS, etc.), participation in scanning tours of best practices, and assistance in proof-of-concept design and system implementation.

2. COORDINATION MEETINGS & PROJECT REPORTING

The Consultant shall conduct periodic coordination meetings as agreed to by the Project Manager to discuss contract and task order status. The Consultant shall develop a progress schedule at the beginning of each task order upon Notice to Proceed (NTP), to be approved by the Project Manager. The Consultant shall provide updated progress schedules on a monthly basis along with a monthly status report to be submitted with invoices. The Consultant shall be responsible for making sure the project schedule is being kept. The status report shall include at a minimum a discussion of the previous

month's progress, problems that were encountered, unresolved issues, anticipated work for the next month and a record of comments.

3. PERFORM SYSTEM ENGINEERING ANALYSES

The Consultant shall perform various ITS system engineering analyses, studies, evaluations, and reports as directed by the Project Manager. Such work includes: performing ITS product/system reviews, developing pros/cons associated with these products, developing system alternatives and providing recommendations using DOTD-standard software, and engineering alternative analyses and feasibility studies.

The System Engineering work performed herein shall comply with DOTD, federal, and industry-accepted standards and procedures.

4. SYSTEM ENGINEERING DESIGN PLANS, SPECIFICATIONS & COST ESTIMATES

The Consultant shall develop system engineering design plans, specifications, technical requirements, and cost estimates for various ITS projects as directed by the Project Manager. Projects may include new ITS system deployments, upgrades and/or replacement of existing systems. Plans shall be developed and delivered in Microsoft Office programs or DOTD-accepted formats.

5. SYSTEM INTEGRATION SERVICES

The Consultant shall design, develop, and assist in the implementation of systems necessary to provide seamless integration between the various Advanced Transportation Management System (ATMS), Advanced Traveler Information System (ATIS), AV/CV, and ETC systems in use or planned by the ITS Section. Projects may include, but not limited, to ITS web site interfaces to databases, specialized traffic data reports, interfaces with third party ITS and traffic data providers, traveler information services applications, specialized ETC (Electronic Toll Collection) system applications, and AV/CV initiatives.

6. INDEPENDENT VERFICATION AND VALIDATION (IV&V)

The Consultant shall oversee, manage, monitor and/or evaluate testing activities including the final ITS system acceptance testing and document all test results for system deployments and/or enhancements to existing systems as directed by the Project Manager. If required, the Consultant shall perform the actual testing activities as directed by the Project Manager.

7. STRATEGIC IMPLEMENTATION PLANNING SERVICES

The Consultant shall provide applied experience and subject matter expertise in developing and delivering strategic implementation planning services in the areas of AV/CV technology, ATIS, ATMS, and ETC Systems.

8. ITS ARCHITECTURES

The Consultant shall develop and/or make updates and/or modifications to the statewide and/or regional ITS architectures as necessary and directed by the Project Manager. All work shall fully comply with the requirements of 23 CFR Part 940 and DOTD guidance.

9. REPORT DELIVERABLES

The necessary copies of Architectures, SE Analyses, system design plans, estimate of quantities and cost, studies/evaluations, reports, ITS network diagrams, and all other applicable work performed under this Contract shall be delivered from the Consultant to the DOTD's ITS Section in electronic format and/or hard copy format as directed by the Project Manager. The electronic data shall be in the original software format.

REFERENCES

All services and documents will meet the standard requirements as to format and content of the DOTD; and will be prepared in accordance with the latest applicable editions, supplements and revisions of the following:

- 1. AASHTO Standards, ASTM Standards or DOTD Test Procedures
- 2. DOTD Location and Survey Manual
- 3. DOTD Roadway Design Procedures and Details
- 4. DOTD Hydraulics Manual
- 5. DOTD Standard Specifications for Roads and Bridges
- 6. Manual of Uniform Traffic Control Devices (2003 Edition)
- 7. DOTD Traffic Signal Design Manual
- 8. National Environmental Policy Act (NEPA)
- 9. National Electric Safety Code
- 10. National Electric Code (NFPA 70)
- 11. DOTD Environmental Impact Procedures (Vols. I-III)
- 12. Policy on Geometric Design of Highways and Streets
- 13. Construction Contract Administration Manual
- 14. Materials Sampling Manual
- 15. DOTD Bridge Design Manual
- 16. Consultant Contract Services Manual
- 17. Geotechnical Engineering Services Document
- 18. Bridge Inspectors Reference Manual, October 2002
- 19. Manual of Instruction for Preparation of Engineering Proposals, rev. June 1, 1998
- 20. The National ITS Architecture, Version 6.0, available from the FHWA Web Site
- 21. The Road to Successful ITS Software Acquisition, USDOT Publication, Report No. FHWA-JPO-98-035, Sponsoring Agency Code HVH-1, July 1998.

Follow link below for the individual reference links:

http://webmail.dotd.louisiana.gov/ContWEB.nsf/b88769326453bef886256fe00047183a/1 8fc2860512aba5886257a62006133b8?OpenDocument

COMPENSATION

Compensation to the Consultant for services rendered in connection with this Contract will be made on the basis of actual cost plus a fixed fee, with a maximum limitation, based on negotiated man hours.

The amount payable under this Retainer Contract for services to be performed under the various TO's shall not exceed a maximum of \$2,000,000. Each TO shall be payable under the respective TO project number which shall be obtained by the Project Manager.

All travel related expenses will be compensated under direct expenses, and will be in accordance with Louisiana Office of State Travel regulations found at: http://www.doa.la.gov/osp/travel/travelpolicy/2015-16TravelGuide.pdf Vehicle rental rates will require prior approval from the DOTD Project Manager.

DIRECT EXPENSES

All direct expense items which are not paid for in the firm's overhead which are needed and will be consumed during the life of the contract must be identified by the consultant during contract development. Standard equipment to be used in the provision of services rendered for this contract will not be considered for payment under direct expenses. Failure to provide the above information will deem items as non-qualifying for direct expenses.

The consultant shall provide a minimum of three rate quotes for any specialty vehicle or equipment. Any and all items for which said quotes are not submitted shall be deemed as non-qualifying for payment as direct expenses.

The Consultant may request to have the initial billable rates updated on a yearly basis. However, any adjustment to the Contract billable rates shall not be cause for an increase in the maximum compensation limitation imposed herein.

CONTRACT TIME AND NOTICE TO PROCEED

This Retainer Contract shall be in effect for the duration of **two years**. The services to be performed for each Task Order (TO) will be determined prior to the execution of the TO. The Consultant will proceed with the services required in the TO upon issuance of the Notice to Proceed from the DOTD. The contract time for each TO, will be specified in the executed TO. Any TO in effect, prior to the expiration date of the Retainer Contract shall be completed. Any TO which has not expired may be supplemented as long as the Retainer Contracts funds have not been exhausted.

ELECTRONIC DELIVERABLES

The Consultant hereby agrees to produce electronic deliverables in conformance with the DOTD Software and Deliverable Standards for Electronic Plans document. The Consultant is also responsible for ensuring that Sub-Consultants submit their electronic deliverables in conformance with the same standards. The DOTD Software and Deliverable Standards for Electronic Plans document and DOTD CAD Standards Downloads are available via links on the DOTD web site.

The Consultant shall apply patches to CAD Standard Resources and install incremental updates of software as needed or required. The Consultant hereby agrees to install major updates to software versions and CAD Standard Resources in a timely manner. Major updates of CAD standards and software versions shall be applied per directive or approval of the DOTD Design Automation Manager. Such updates will not have a significant impact on the plan development time or project delivery date, nor will they require the Consultant to purchase additional software. Prior to proceeding with plan development, the Consultant shall contact the Project Manager for any special instructions regarding project-specific requirements.

In the event that any electronic standard conflicts with written documentation, including DOTD plan-development Manuals, the electronic standard typically governs. The Consultant is responsible for contacting the Project Manager should questions arise.

The Consultant shall upload (or check in) electronic deliverables directly into the DOTD ProjectWise repository at each plan delivery milestone. Consultants are responsible for performing certain operations at each milestone including, but not limited to, the following:

- Upload (or check in) CAD plan deliverables to the discipline "Plans" folder
- Apply and maintain indexing attributes to CAD plans (and other deliverables as needed)
- Publish PDF format plan submittals in ProjectWise using automated publishing tools
- Digitally sign PDF format plan submittals in ProjectWise according to DOTD standards and procedures (Final Plans, Revisions and Change Orders). Signatures shall be applied in signature blocks provided with electronic seals and Title Sheets.

Additionally, after reviewing deliverables for each submittal milestone, the Project Manager shall notify the Consultant regarding the availability of two automatically-generated informational reports in ProjectWise. These reports document the completion status and other information regarding indexing attributes and CAD standards. Consultants shall take these reports into account and make any necessary adjustments to plans before the next submittal milestone; or sooner, if directed by the Project Manager.

QUALITY CONTROL/QUALITY ASSURANCE

The DOTD requires the Consultant to develop a Quality Control/Quality Assurance program; in order to provide a mechanism by which all contracted services can be subject to a systematic and consistent review. Consultants must ensure quality and adhere to established design policies, procedures, standards, and guidelines in the preparation and review of all design products. The DOTD shall provide limited input and technical assistance to the Consultant.

ITEMS TO BE PROVIDED BY DOTD

Any existing architecture, system engineering analyses and/or business plans that will be applicable.

MINIMUM PERSONNEL REQUIREMENTS

The following requirements must be met at the time of submittal:

- 1. At least one Principal of the Prime-Consultant shall be a Professional Engineer registered in the State of Louisiana.
- 2. At least one Principal or other Responsible Member of the Prime-Consultant must be a Professional Engineer, registered in the State of Louisiana, with a least five years of experience in ITS engineering design.
- 3. In addition to the above, the Prime Consultant must employ on a full time basis:
 - a. A minimum one Professional Engineer, registered in the State of Louisiana, with at least five years of experience in ITS Engineering Design.
 - b. One Electrical Engineer and/or Systems Engineer, registered in the State of Louisiana, with a minimum of two years of experience in ITS systems engineering processes and ITS network design.
- 4. The Prime Consultant must also employ on a full-time basis, or through the use of a Sub-Consultant(s):
 - a. One Professional Engineer, registered in the State of Louisiana or Information Technology Specialist with a minimum of two years of experience as a subject matter expert in field of AV/CV system analysis, design and implementation applied to both V2I and V2V.
 - b. One Professional Engineer, registered in the State of Louisiana, or Information Technology Technician with a minimum of three years of experience as a subject matter expert in performing management and operations, system diagnostics and troubleshooting, system testing, and system maintenance of ITS systems and ETC systems.
 - c. One Systems Analyst with formal instruction and training in structured system analysis and system design, and a minimum of four years of experience in the analysis and design of geographically dispersed control systems and networks (client software, server based software, communications infrastructure, field devices and how they are used in a

control system, and center-to-center system design and operations) which include at a minimum cost/economic analysis, engineering-based performance measures, client operation and maintenance capabilities, alternative analysis and recommendations.

d. One Information Technology Specialist with formal instruction and training in developing database and web applications.

Training Certifications/Certifications of Compliance must be submitted with and made part of the Consultants DOTD Form 24-102 for all Personnel Requirements listed herein.

EVALUATION CRITERIA

The general criteria to be used by DOTD in evaluating responses for the selection of a Consultant to perform these services are:

- 1. Consultant's firm experience on similar projects, weighting factor of 3;
- 2. Consultant's personnel experience on similar projects, weighting factor of 4;
- 3. Consultant's firm size as related to the estimated project cost, weighting factor of 3***
- 4. Consultant's past performance on similar DOTD projects, weighting factor of 6;**
- 5. Consultant's current work load, weighting factor of 5;*
- 6. Location where the work will be performed, weighting factor of 4. *

**The ITS Design (IT) performance rating will be used for this project.

*** Firms with a ratio of 5 or greater on the Department's firm size graph will receive a compatibility rating of no less than 2.

Consultants with no past performance rating in a rating category will be assigned the average rating of the firms submitting; with ratings capped at the statewide average rating for that category as of the date the advertisement was posted.

Complexity level- complex

Consultants will be evaluated as indicated in Items 1-6. The evaluation will be by means of a point-based rating system. Each of the above criteria will receive a rating on a scale of 1-5. Then the rating will be multiplied by the corresponding weighting factor. The firm's ratings in each category will then be added to arrive at the Consultant's final rating.

If Sub-Consultants are used, the Prime Consultant must perform a minimum of 51% of the work for the overall project. Each member of the Consultant/Team will be evaluated on their part of the contract, proportional to the amount of their work. The individual team member ratings will then be added to arrive at the Consultant/Team rating.

^{*}All respondents will receive a 5 in this category.

Communication Protocol

DOTD's Project Evaluation Team will be responsible for performing the above described evaluation, and will present a short-list of the three (if three are qualified) highest rated Consultants to the Secretary of the DOTD. The Secretary will make the final selection. Below are the proposed Team members. DOTD may substitute for any reason provided the members meet the requirements of R.S. 48:291.

- 1. Masood Rasoulian Ex officio
- 2. Carryn Sollie Project Manager
- 3. Scott Choate
- 4. Roy Esteven
- 5. Lei Wang
- 6. Adriane McRae

Rules of Contact (Title 48 Engineering and Related Services)

These rules are designed to promote a fair, unbiased, legally defensible selection process. The LA DOTD is the single source of information regarding the Contract selection. The following rules of contact will apply during the Contract selection process and will commence on the date of advertisement and cease at the contract execution by the selected firm. Contact includes face-to-face, telephone, facsimile, Electronic-mail (E-mail), or formal written communications. Any contact determined to be improper, at the sole discretion of the LA DOTD, may result in the rejection of the submittal (24-102):

- A. The Consultant shall correspond with the LA DOTD regarding this advertisement only through the LA DOTD Consultant Contracts Services Administrator;
- B. Neither the Consultant, nor any other party on behalf of the Consultant, shall contact any LA DOTD employees, including but not limited to, department heads; members of the evaluation teams; and any official who may participate in the decision to award the contract resulting from this advertisement except through the process identified above. Contact between Consultant organizations and LA DOTD employees is allowed during LA DOTD sponsored one-on-one meetings;
- C. Any communication determined to be improper, at the sole discretion of the LA DOTD, may result in the rejection of submittal, at the sole discretion of the LA DOTD;
- D. Any official information regarding the project will be disseminated from the LA DOTD'S designated representative on the LA DOTD website. Any official correspondence will be in writing;
- E. The LA DOTD will not be responsible for any verbal exchange or any other information or exchange that occurs outside the official process specified herein.

By submission of a response to this RFQ, the Consultant agrees to the communication protocol herein.

CONTRACT REQUIREMENTS

The selected Consultant will be required to execute the contract within 10 days after receipt of the contract.

INSURANCE - During the term of this contract, the Consultant will carry professional liability insurance in the amount of \$1,000,000. This insurance will be written on a "claims-made" basis. Prior to executing the contract, the Consultant will provide a Certificate of Insurance to DOTD showing evidence of such professional liability insurance.

AUDIT - The selected Consultant/Team shall provide to the DOTD Audit Section an *independent* Certified Public Accountant (CPA) audited overhead rate developed in accordance with Federal Acquisition Regulations (FAR) and guidelines provided by the DOTD Audit Section. In addition, the selected Consultant/Team will allow the DOTD Audit Section to perform an overhead audit of its books, at the DOTD's sole discretion. The performance of such an audit by the DOTD Audit Section shall not relieve the Consultant/Team of its responsibilities under this paragraph.

Consultants are also required to submit labor rate information twice a year to the DOTD's Audit Section and/or as requested by DOTD. Newly selected firms must have audited salaries and overhead rates on file with the DOTD's Audit Section before starting any additional stage/phase of their contracts. All Qualification Statements (24-102) submitted to DOTD by Consultants currently under contract may be considered non-responsive if the consultant is not in compliance with the above audit requirements.

DBE/WBE - The selected Consultant Team will have a DBE/WBE goal of 2% of the contract fee. DBE/WBE participation will be limited to the firms listed on the LA DOTD UCP DBE Directory which can be found at the following link: http://www8.dotd.la.gov/UCP/UCPSearch.aspx. The DOTD Project Manager shall review submitted invoices to determine if the DBE/WBE goals are being achieved. If the Consultant has failed to meet the goal and no good faith efforts have been made, the DOTD Project Manager shall notify the Compliance Section, and at that time the DBE/WBE portion of the Contract fee will be withheld from the Prime Consultant.

Any Consultant currently under contract with the DOTD and who failed to meet all the audit requirements documented in the manual and/or notices posted on the DOTD Consultant Contract Services Website (www.dotd.louisiana.gov), will not be considered for this project.

SUBMITTAL REQUIREMENTS

One original (stamped "original") and five copies of the DOTD Form 24-102 must be submitted to DOTD along with an electronic copy (USB flash drive only) in a searchable Portable Document Format (pdf). If you wish to have your flash drive returned, please include a postage paid, self-addressed envelope. All submittals must be in accordance with the requirements of this advertisement and the Consultant Contract Services Manual.

Any Consultant/Team failing to submit any of the information required on the 24-102, or providing inaccurate information on the 24-102, will be considered non-responsive.

Any Sub-Consultants to be used, including Disadvantaged Business Enterprises (DBE), in performance of this Contract, must also submit a 24-102, which is completely filled out and contains all information pertinent to the work to be performed.

The Sub-Consultant's 24-102 must be firmly bound to the Consultant's 24-102. In Section 8, the Consultant's 24-102 must describe the **work elements** to be performed by the Sub-Consultant(s), and state the approximate **percentage** of each work element to be subcontracted to each Sub-Consultant.

Contract employees may be allowed for a period of time for a particular element or task on a project. Contract employees should be shown in **Section 9a. Project Staffing Plan** with resumes included in **Section 10**.

<u>Use of contract employees requires prior approval by the Consultant Contract Services</u>

<u>Section for each element or task on a project. The approval request shall be made prior to the submittal of the 24-102 form.</u>

Name(s) of the Consultant/Team listed on the 24-102, must precisely match the name(s) filed with the Louisiana Secretary of State, Corporation Division, and the Louisiana State Board of Registration for Professional Engineers and Land Surveyors.

The DOTD Form 24-102 will be identified with **Contract No. 4400008172**, and will be submitted **prior to 3:00 p.m. CST** on **Tuesday**, **February 23**, **2016**, by hand delivery or mail, addressed to:

Department of Transportation and Development Attn.: Mr. Masood Rasoulian, P.E. Contracts Services Administrator 1201 Capitol Access Road, **Room 405-E** Baton Rouge, LA 70802-4438 or Telephone: (225) 379-1433

REVISIONS TO THE RFQ

DOTD reserves the right to revise any part of the RFQ by issuing an addendum to the RFQ at any time. Issuance of this RFQ in no way constitutes a commitment by DOTD to award a contract. DOTD reserves the right to accept or reject, in whole or part, all Qualification Statements submitted and/or cancel this announcement if it is determined to be in DOTD's best interest. All materials submitted in response to this announcement become the property of DOTD and selection or rejection of a submittal does not affect this right. DOTD also reserves the right, at its sole discretion, to waive administrative informalities contained in the RFQ.